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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,182	10/26/2005	Sebastien Weitbruch	PD020082	3480

7590 04/29/2009
Joseph S Tripoli
Patent Operations
Thomson Licensing Inc
PO Box 5312
Princeton, NJ 08543-5312

EXAMINER

NATNAEL, PAULO S M

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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04/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,182	Applicant(s) WEITBRUCH ET AL.	
	Examiner PAULOS M. NATNAEL	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13, 14, 16, 17, 20, 21 and 23 is/are rejected.
- 7) ☒ Claim(s) 15, 18-19, 22, 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

2. Applicant's arguments with respect to claims **13-17,20-24** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **13-14, 16-17, 20-21 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lillevold, US **7,054,500**.

Considering claim 13, Lillevold discloses the following claimed subject matter,

a) digitally filtering a signal charged with said noise with a digital filter having a plurality of filter coefficients....is met by Filter 30 which is a digital filter (col. 8, line 15).

b) varying at least one of said filter coefficients of the filter in dependence on the video level for a current pixel by stronger filtering a lower video level for said pixel while less filtering or not filtering a higher video level for said pixel to reduce noise in the lower video level....is met by the disclosure that " ..the filter 30 has a variable filter strength that depends upon the motion activity within a picture. The filter strength can be adjusted by varying the filter coefficients of the filter 30. In one embodiment, the filter 30 may be adjusted to have one of a number of predetermined levels representing different filter strengths. In one embodiment, the filter 30 has three levels, Strong ("S"), Medium ("M") or Weak ("W") as shown in FIG. 3C. It is contemplated that more than three levels may be defined." (col. 8, lines 17-23; emphasis added).

Except for;

c) the claimed "...said signal including a video level for each pixel of said display."

Lillevold does not specifically disclose the video level for each pixel. However,

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Lillevoid teaches frame-by-frame processing which is further broken into 4x4 micro-block. It would be obvious to the skilled in the art the micro-block represents blocks of pixels. Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of frame-by-frame or micro-block processing in Lillevoid into pixel-by-pixel processing. Doing so would make the processing more accurate.

As to claim 14 wherein said filtering includes one and/or two dimensional low pass filtering....is met by the disclosure on paragraph [0009]: In order to reduce the effects of the coding artifacts, it is known to apply a post-processing technique to the recovered image. Since the artifacts typically comprise high frequency components, decoders in systems that apply such post-processing include a postprocessor having a low-pass filter to filter out those components in the recovered image.

As to claim 16, (Currently Amended) Method according to claim 13, wherein the value of a filter coefficient decreases when the luminance of a current pixel increases a decreased value for the filter coefficient is used for a pixel with increased luminance.

As to claim 16, see rejection of claim 13.

Regarding claim 17, the claimed wherein the spatial dimension and/or the temporal direction of said digital filter varies with the video level of a current pixel.

As to claim 17, see rejection of claim 13.

Considering claim 20, see rejection of claim 13.

Considering claim 21, see rejection of claim 14.

Considering claim 23, see rejection of claim 13.

Allowable Subject Matter

5. Claims **15, 18,19,22, 24** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 3

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAULO M. NATNAEL whose telephone number is (571)272-7354. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAULOS M. NATNAEL/
Primary Examiner, Art Unit 2622

PMN
April 21, 2009